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| Breakout 3 Responding to Students Over Time | | Grade |
| 120 min | Learning Goals  I will use student samples to identify the next step for student learning.  I will develop a clearer understanding of what it means to respond to students over time. | Materials   * EQAO samples 2010 (P &A question) * Continuums from Cathy and Ruth |
|  | Whole Group🡪  Clapping Activity, as described in the file posted on the Wiki. | * Lesson artefacts student_work * Professional  dialogue dialogue |
| Minds On… |
| 30 min. |
|  | Jigsaw 🡪  Participants get into groups of three, and number themselves 1, 2 and 3. Participants each take part in one of the following activities, and then groups get back together at the end, and each member of the triad shares their work and their learning.  Group One:  With a partner, solve the Grade 3 EQAO question from 2010 P & A #9, in your journals, anticipating the type of response you hope to see. Join another dyad and share your response (work-pair-square). Distribute the student responses from the exemplars. Study the other exemplars. Discuss the student work through the lens of either of the two continuums shared by Cathy and Ruth during their presentation (Plenary PPT 1 and 2). Identify the student’s strengths and needs. Prepare some feedback that you might give to individual students or to the group. All partners join together for 10 minutes prior to going back to their group of three, to have a group discussion.  Group Two:  With a partner, solve Ferdie’s Puppy problem. Consider all four strategies that we have discussed in the plenary session: additive thinking, multiplicative thinking, multiple representations, and graphic representations. Are they all possible for this problem? Are they all appropriate for this problem?  Distribute student work samples. In the same pairs, participants look at the student work and sort by strategy.  Using the continuum of justifications from Cathy and Ruth, choose three pieces of student work. What key questions would you ask to move students forward? All partners join together as a large group for 10 minutes prior to going back to their group of three, to have a group discussion.  Group Three:  With a partner, re-familiarize yourself with the Pine Tree problem.Look at student samples of the Pine Tree problem (student samples from Ruth). Groups each get different samples of student work. Look at the sample through the lens of learning goals and consolidation questions: What were the learning goals for this problem – based on all of the questions on the sheet – and **(**looking at your student work**)** what questions would you ask the student to help to consolidate their learning?All partners join together for 10 minutes prior to going back to their group of three, to have a group discussion. | *Assessment* ***for*** *learning*  (inform future instruction)   * Lesson artefacts student_work   aol  *Assessment* ***of*** *learning*  (student achievement). |
| Action! |
| 60 Minutes |
|  | Whole Group🡪  Ask each triad to share an observation about what was similar and what was different within your experiences. Facilitators create a T-chart of similarities and differences.(We ran out of time to do this.)  Individual Reflection  “The charm of fishing is that it is the pursuit of that which is elusive but attainable, a perpetual series of occasions for hope – anonymous  Think of an experience that you have had so far at camp that has given you hope about teaching algebraic thinking. |  |
| Consolidate Debrief |
| 25 Minutes |
| 5 Minutes | Home Activity or Further Classroom Consolidation  Participants attach a foam trophy or ribbon to their hat to symbolize the accomplishment of being so amazing at Math CAMPPP all week. |  |